

REMARKS

Reconsideration of this application as amended is respectfully requested. Claim 6 has been amended to correct a minor grammatical error. As such, claims 1 to 14 are in this application and are presented for the Examiner's consideration in view of the following comments.

Claims 1-14 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,363,060 issued March 26, 2002 to Sarkar (*Sarkar*). Applicants respectfully disagree.

Applicants claimed invention is directed to selecting a synchronization word as a function of an associated metric value. This associated metric is formed, e.g., from individual correlation values of all the possibly received constituent symbols in a time slot. As such, it is important to note that the individual metric value of a particular symbol making up the synchronization word is not necessarily the highest correlation value. (See the simplified example, Applicants' specification, p. 8, ln. 32 to p. 9, ln. 32.)

The Examiner points to the following description in *Sarkar*:

In the preferred embodiment of the invention, a correlation strength metric is generated for each decoded SSC symbol. This correlation strength metric is a measure of the degree of correlation between the estimated transmitted symbol value and the received signal, and is generated during the first stage of the two-stage SSC decoding method described above. The correlation strength metrics, along with the estimated received symbols, are used as input for the Chase algorithm to determine the received SSC code word. The Chase algorithm is an improved method of performing "soft decision" decoding of block codes, and was described in an article by David Chase in "IEEE TRANSACTIONS ON INFORMATION THEORY, VOL. IT-18, NO. 1, JANUARY 1972". The use of the Chase algorithm provides improvement in SSC decoding accuracy of as much as 2 dB for additive white Gaussian (AWGN) channels, and 6-8 dB for fading channels.

*Sarkar*, col. 9, lns. 36-53, emphasis added.

Respectfully, this is not Applicants' claimed invention. For example, consider Applicants' independent claim 1. Applicants' claim 1 clearly requires metric values

associated with each of the  $M$  synchronization words, where  $M > 1$ . In contrast, *Sarkar* simply describes estimating a received symbol and associating with that estimated symbol one correlation metric. As such, at best you have a sequence of estimated symbols, with a correlation metric for each estimated received symbol. This is not a metric value associated with each of the M synchronization words as claimed by Applicants.

Likewise, consider Applicants' independent claim 7. *Nowhere* does *Sarkar* describe storing probabilities that each one of  $K$  possible received symbols was received in one time slot – and that this is performed over  $S$  time slots as required by Applicants' claim 7. As noted above, the receiver in *Sarkar* estimates one received symbol in a time slot and provides one associated correlation value. In contrast, Applicants' claim 7 requires in effect, for each of  $S$  time slots,  $K$  probability values for each one of the  $K$  possible symbols that could have been received.

Similar requirements are found in Applicants' remaining independent claims 9 and 12.

As a result of the above, Applicants respectfully submit that independent claims 1, 7, 9 and 12 are patentable over *Sarkar*. Consequently, claims 2-6, 8, 10-11 and 13-14 are also in condition for allowance.

As it is believed that all of the objections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited. If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that the Examiner telephone Applicants' attorney in order to overcome any additional objections that the Examiner might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 07-0832 therefor.

Respectfully submitted  
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